

Claims:

1. (Currently Amended) A composition consisting essentially of a solidified ~~molten~~ suspension of a solid fluoropolymers evenly dispersed in a molten flame retardant.
2. (Currently Amended) A composition according to claim 1, consisting of particles, said particles comprising one or more fluoropolymers and flame retardants.
3. (Previously Presented) A composition according to claim 1, wherein said fluoropolymer is enveloped by the flame retardant.
4. (Previously Presented) A composition according to claim 1, wherein said fluoropolymer is selected from the group consisting of polytetrafluoroethylene (PTFE), poly(hexafluoroethylene), poly(tetrafluoroethylene-hexafluoroethylene), and poly(tetrafluoroethylene-ethylene-propylene).
5. (Previously Presented) A composition according to claim 1, wherein said flame retardant is selected from organic bromine compounds and organic phosphorus compounds.
6. (Previously Presented) A composition according to claim 5, wherein said flame retardant is selected from the group consisting of brominated epoxy resins, high molecular weight brominated epoxy resins, modified brominated epoxy resins, low molecular weight brominated epoxy resins, tetrabromobisphenol bis (2,3-dibromopropyl ether), partly end-capped brominated epoxy resins with fatty acid, tris(tribromophenyl) triazine, bromophenyltrimethylindane, brominated polyacrylate, brominated polycarbonate, phenoxy-terminated carbonate oligomer of tetrabromobisphenol A, poly(pentabromobenzyl acrylate, brominated acrylate monomer, brominated styrene and their homo- and co-polymers, tetrabromobisphenol A, brominated diphenylethane,

decabromodiphenyl oxide, tris(tribromoneopentyl) phosphate, alkyl phosphinic acid salts, phosphate esters, phosphonate esters, and their mixtures.

7. (Previously Presented) A composition according to claim 1, containing an amount of fluoropolymer from 0.1 wt% to 60 wt%.

8. (Previously Presented) A composition according to claim 7, containing an amount of fluoropolymer from 0.5 wt% to 20 wt%.

9. (Previously Presented) A composition according to claim 1, wherein the flame retardant has a melting point below 300 °C.

10. (Previously Presented) A composition according to claim 1, wherein the flame retardant is obtained from precursors having a melting point below 300 °C.

11. (Previously Presented) A composition according to claim 1, further comprising additional additives selected from the group consisting of ultraviolet and light stabilizers, UV screeners, UV absorbers, release agents, lubricants, colorants, plasticizers, fillers, blowing agents, heat stabilizers, antioxidants, reinforcement additives, impact modifiers, and processing aids.

12. (Previously Presented) A composition according to claim 1, comprising flame retardants or the flame retardant precursors having a melt viscosity lower than 10000 cp.

13. (Previously Presented) A composition according to claim 12, wherein said flame retardants or said flame retardant precursors have a melt viscosity lower than 2000 cp.

14. (Withdrawn) Process for making a composition according to claim 2, which comprises melting a flame retardant, mixing the fluoropolymer with said molten flame retardant, allowing the mixture to solidify and particulating the solidified mixture.

15. (Withdrawn) Process for making a composition according to claim 2, which comprises providing flame retardant precursors in molten condition, mixing said precursors with a fluoropolymer and optionally with a catalyst, reacting said precursors to form a molten flame retardant mixed with said fluoropolymer, allowing the mixture to solidify and particulating the solidified mixture.

16. (Withdrawn) Thermoplastic composition comprising a thermoplastic polymer matrix and an additive composition according to claim 1.

17. (Withdrawn) Thermoplastic composition according to claim 16, wherein the polymer matrix comprises at least one polymer selected from the group consisting of polystyrene, impact polystyrene, styrene copolymers, acrylonitrile butadiene styrene terpolymers (ABS), alloys of ABS such as polycarbonate/ABS, alloys of polystyrene such as polyphenylene oxide/polystyrene, polycarbonates, polycarbonate alloys with PBT or polyamide, polyesters such as polybutylene terephthalate (PBT) and polyethylene terephthalate (PET), polyamide resins such as polyamide 6 and 66, styrene acrylonitrile copolymer (SAN), polyphenylene ether (PPE), polyester carbonate and blends of the aforesaid polymers.

18. (Withdrawn) Process for making a thermoplastic composition according to claim 16, which comprise the steps of compounding the polymer matrix with the additive composition and optionally with other additives.

19. (Withdrawn) Process according to claim 18, wherein the polymer matrix and the additive composition, and optionally the other additives, are compounded in an apparatus selected from the group consisting of extruders, batch mixers and internal mixers.

20. (Withdrawn) Plastic articles made by extruding or molding a thermoplastic composition according to claim 16.

21. (Withdrawn) Master batch containing the composition of claim 1 in a thermoplastic carrier.

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Previously Presented) A composition according to claim 2, wherein said fluoropolymers are selected from the group consisting of polytetrafluoroethylene (PTFE), poly(hexafluoroethylene), poly(tetrafluoroethylene-hexafluoroethylene), and poly(tetrafluoroethylene-ethylene-propylene).

26. (Previously Presented) A composition according to claim 2, wherein said flame retardants are selected from organic bromine compounds and organic phosphorus compounds.

27. (Previously Presented) A composition according to claim 26, wherein said flame retardants are selected from the group consisting of brominated epoxy resins, high molecular weight brominated epoxy resins, modified brominated epoxy resins, low molecular weight brominated epoxy resins, tetrabromobisphenol bis (2,3-dibromopropyl ether), partly end-capped brominated epoxy resins with fatty acid, tris(tribromophenyl) triazine, bromophenyltrimethylindane, brominated polyacrylate, brominated polycarbonate, phenoxy-terminated carbonate oligomer of tetrabromobisphenol A, poly(pentabromobenzyl acrylate), brominated acrylate monomer, brominated styrene and their homo- and co-polymers, tetrabromobisphenol A, brominated diphenylethane, decabromodiphenyl oxide, tris(tribromoneopentyl) phosphate, alkyl phosphinic acid salts, phosphate esters, phosphonate esters, and their mixtures.

28. (Previously Presented) Composition according to claim 2, containing an amount of fluoropolymer from 0.1 wt% to 60 wt%.

29. (Previously Presented) A composition according to claim 28, containing an amount of fluoropolymer from 0.5 wt% to 20 wt%.

30. (Previously Presented) A composition according to claim 2, wherein the flame retardant has a melting point below 300 °C.

31. (Previously Presented) A composition according to claim 2, wherein the flame retardant is obtained from precursors having a melting point below 300 °C.

32. (Withdrawn) Thermoplastic composition comprising a thermoplastic polymer matrix and an additive composition according to claim 2.

33. (Withdrawn) Thermoplastic composition according to claim 32, wherein the polymer matrix comprises at least one polymer selected from the group consisting of polystyrene, impact polystyrene, styrene copolymers, acrylonitrile butadiene styrene terpolymers (ABS), alloys of ABS such as polycarbonate/ABS, alloys of polystyrene such as polyphenylene oxide/polystyrene, polycarbonates, polycarbonate alloys with PBT or polyamide, polyesters such as polybutylene terephthalate (PBT) and polyethylene terephthalate (PET), polyamide resins such as polyamide 6 and 66, styrene acrylonitrile copolymer (SAN), polyphenylene ether (PPE), polyester carbonate and blends of the aforesaid polymers.

34. (Withdrawn) Process for making a thermoplastic composition according to claim 32, which comprise the steps of compounding the polymer matrix with the additive composition and optionally with other additives.

35. (Withdrawn) Process according to claim 34, wherein the polymer matrix and the additive composition, and optionally the other additives, are compounded in an apparatus selected from the group consisting of extruders, batch mixers and internal mixers.

36. (Withdrawn) Plastic articles made by extruding or molding a thermoplastic composition according to claim 32.